

# Customer saved \$6 million USD by using the LIFESPAN blending model to increase profitability and avoid process unit fouling

## CHALLENGES

- Uncalculated risk when purchasing opportunity cargo
  - Blend data is unavailable at decision time because sampling takes too long
  - Unknown impact on asphaltene stability increases the risk of an unstable blend
- Negative impact on operations and profitability
  - Risk of increased OPEX due to processing issues resulting from blend incompatibility
  - Lost profits due to the reduced market value of an unstable fuel oil blend

## SOLUTION

- Used the [LIFESPAN™ blending model](#) to rapidly predict blend stability ahead of cargo arrival
  - Assay data on incoming cargo was fed into the proprietary LIFESPAN blending model
  - The model predicted the asphaltene stability risk of multiple possible blends, based on historically similar crudes
- Managed blend stability risk over time
  - LIFESPAN model projected blend behavior over 30-, 60-, and 90-days
  - This data was used by the customer to develop and implement mitigation strategies for less stable blends

## RESULTS

### \$1 million USD

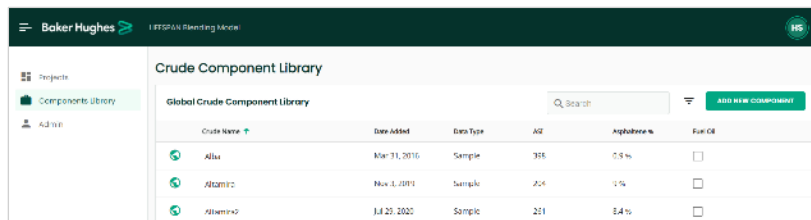
Approximate profit on incremental throughput of opportunity feedstocks

### \$5 million USD

OPEX savings by avoiding crude unit shutdown from blend incompatibility

**“The LIFESPAN blending model helped the customer make faster and more informed purchasing decisions while avoiding costly processing problems.”**

- **Ralph Navarrete**  
Product Line Director



The screenshot shows the 'Global Crude Component Library' interface. It features a search bar, a filter icon, and an 'ADD NEW COMPONENT' button. The table below lists three crude components with their respective details.

Crude Name	Date Added	Data Type	API	Asphaltenes %	Fuel Oil
Alba	Mar 31, 2016	Sample	385	0.5 %	<input type="checkbox"/>
Alamir2	Nov 3, 2019	Sample	204	1 %	<input type="checkbox"/>
Alamir42	Jul 20, 2020	Sample	201	0.4 %	<input type="checkbox"/>

Example view of existing and user-created components